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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-----------------------|---------------------|------------------|
| 10/624,908   | 07/22/2003  | Miklos Paul Petervary | 7784-000565         | 7084             |
| 7590 03/01/2006  |             |                       | EXAMINER            |                  |
| Mark D. Elchuk<br>Harness, Dickey & Pierce, P.L.C.<br>P.O. Box 828<br>Bloomfield Hills, MI 48303 |             |                       | WHITE, DWAYNE J     |                  |
|  |             |                       | ART UNIT            | PAPER NUMBER     |
|  |             |                       | 3745                |                  |

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                  |  |
|------------------------------|-------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/624,908 | Applicant(s)<br>PETERVARY ET AL. |  |
|                              | Examiner<br>Dwayne J. White   | Art Unit<br>3745                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 24 is/are allowed.
- 6) ☒ Claim(s) 8-10, 14, 15 and 17-22 is/are rejected.
- 7) ☐ Claim(s) 11-13 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 19 January 2006 have been fully considered. Claims 1-24 are pending. Applicant has provided arguments in regards to the anticipation rejection under 35 USC 102(b) by Meginnis (3,386,199). Specifically, Applicant argues: independent claim 8 is not anticipated by Meginnis because the cited prior art does not disclose, "that a skin is positioned a distance from a member to define a coolant conduit in which a coolant is disposed;" claim 14 is not anticipated by Meginnis because the reference does not recite a coolant pressurizing system, simply discloses that air can pass through the pores defined in a layer of material, and further teaches away from a pressurized system because Meginnis discloses that the flow is directed by an angle which enters the structure; and claim 17 is not anticipated because the claim has been amended to recite, "forming a selected pore in a structure to allow a substantially unidirectional flow of a coolant," and Meginnis does not teach or suggest that an opening formed in any portion of a device would allow for substantially unidirectional flow. The Examiner respectfully disagrees with these assertions.

With respect to claim 8, it is the position of the Examiner that Meginnis does in fact disclose a skin positioned a distance from a member to define a coolant conduit in which coolant is disposed. Meginnis states in Column 2, lines 13-19 that a coolant is provided to the interior of the blade under pressure and is discharged through the pores. Since the skin (layers 11 and 14) is spaced a distance apart from the blade by bosses 16, that space is being defined as the coolant conduit (Column 2, lines 31-38). Also, as stated above the coolant is under pressure and therefore is the position of the means disclosed by Meginnis reads on the pressurizing system

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claimed by Applicant. Finally in regards to the arguments presented for claim 17, it is the position of the Examiner that since the coolant is pressurized the flow would be substantially unidirectional. Further, Applicant recitation in this method claim does not add a patentable feature in that a pore would generally allow for flow in a single direction. It is unclear to the Examiner how Applicant is defining "unidirectional" when the pores of Meginnis would provide flow in one direction, that being away from the structure.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-10, 14, 15 and 17-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Meginnis (3,864,199). Meginnis discloses a transpiration cooled apparatus comprising: A member for providing a support 14 and a skin 11 surrounding the member including a first side and a second side; wherein the skin is spaced from the member to define a coolant conduit and the skin also defining a pore 20 extending between the first and second sides; wherein coolant used to remove thermal energy from the skin is disposed in the coolant conduit is able to move through the pores. Since the skin covers a turbine blade, it is the position of the Examiner that the skin generally defines a leading edge of the structure. Further, in regards to claim 23 since the apparatus of Meginnis discloses cooling holes (pores), it is the position of the Examiner the selected property step is inherently met since the shapes of the holes are round.

## **CONCLUSION**

### ***Allowable Subject Matter***

Claims 1-7 and 24 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

While the method of cooling an apparatus, as claim in claim 1, is generally known the sub steps recited to form the porous member used in the method were not taught or suggested in any prior art.

Claims 11-13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Contact Information***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J. White whose telephone number is (571) 272-4825. The examiner can normally be reached on 7:00 am to 4 pm T-F and alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Dwayne J White  
Patent Examiner  
Art Unit 3745

DJW

  
EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
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2/27/06